

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-37. (cancelled).

Claim 38. (Previously Presented): A preformed porous ceramic carrier comprising an interconnected skeleton having pores the majority of which are in the range of from about 20 to about 800 micron, the carrier comprising block hydroxyapatite and having a density less than about 30% theoretical, the pores containing a second material deposited therein, the rate of release of the second material from the carrier being controlled.

Claim 39. (Previously Presented): A carrier according to Claim 38, wherein the skeleton is made up of scaffolding and struts.

Claim 40. (Previously Presented): A carrier according to Claim 38, wherein the skeleton has average pore sizes in the range of 20 to 800 micron.

Claim 41. (Previously Presented): A carrier according to Claim 40, wherein the average pore size is in the range of 60 to 800 micron.

Claim 42. (Previously Presented): A carrier according to Claim 41, wherein the micropores were formed by sintering a precursor of the carrier under conditions which were below those required for full sintering.

Claim 43. (Previously Presented): A carrier according to Claim 38, wherein the skeleton is formed of a biocompatible material.

Claim 44. (Previously Presented): A carrier according to Claim 38, wherein the density ranges from about 10% to about 30% of theoretical density.

Claims 45. (Previously Presented): A carrier according to Claim 38, wherein the pores contain anyone or more of: growth factors; antibiotics; vitamins; proteins; hormones; a chemotherapy agent; or a radio opacifying agent.

Claims 46. (Withdrawn): A carrier according to Claim 45, wherein the pores containing any or more of the following growth factors:

- a bone growth material
- FGF (fibroblast growth factor)
- IGF-I
- IGF-II
- PDGF (platelet derived growth factor)

- TGF-B (transforming growth factor)
- A bone forming or bone degrading cell
- BMP-Z
- HGH
- Concentrations of human derived growth factors.

Claim 47. (Withdrawn): A carrier according to Claim 45, wherein the chemotherapy agent is Cisplatin.

Claim 48. (Withdrawn): A carrier according to Claim 45, wherein the radio opacifying agent is strontium -67 or samarium -153.

Claim 49. (Previously Presented): A carrier according to Claim 45, wherein the agent is MTX.

Claim 50. (Currently Amended): A carrier according to Claim 38, wherein the pores contain one or more ~~or~~ of Werner-type co-ordination complexes, macrocyclic complexes; metallocenes and sandwich complexes and organometallics.

Claim 51. (Previously Presented): A carrier according to Claim 38, wherein the surface of the pores has been modified to control release of the second material.

Claim 52. (Previously Presented): A carrier according to Claim 51, wherein the surface of the pores has been modified by treatment with acid or alkali or plasma or chemical vapour deposition.

Claim 53. (Previously Presented): A carrier according to Claim 38, wherein the pores contain the second material in a degradable support, e.g. a biodegradable support.

Claim 54. (Previously Presented): A carrier according to Claim 53, wherein the biodegradable support is a collagen or polymer.

Claim 55. (Previously Presented): A carrier according to Claim 53, wherein the support is poly (carboxyphenoxy) propane sebacic acid (PCPP.SA), precipitated calcium carbonate (PCC), (carboxyphenoxy) propane sebacic acid (CPP.SA), (fatty acid dimmer sebacic acid) poly trimethylene carbonate (FAD-SAPTC), or poly(aspartic acid) (PAA).

Claim 56. (Previously Presented): A carrier according to Claim 53, wherein the pores contain layers of second material and biodegradable support, each layer being different from its neighbour or neighbours.

Claim 57. (Previously Presented): A carrier according to Claim 53, wherein the pores

contain material in layers, arranged as alternating layers of agent-free layer and of agent-containing layers or by the concentration of agent across different layers of collagen or polymer.

Claim 58. (Canceled).

Claim 59. (Previously Presented): A carrier according to Claim 38, wherein the second material is introduced into the pores by one or more of a centrifugation, immersion, vacuum impregnation or freeze drying technique.

Claim 60. (Previously Presented): A carrier according to Claim 38, wherein the exterior surface thereof has been coated with a biodegradable polymer containing a drug.

Claim 61. (Currently Amended): A carrier according to Claim 38, wherein the skeleton of the ceramic carrier is formed from a ~~metal or~~ non-metal oxide.

Claim 62. (Previously Presented): A carrier according to Claim 61, wherein the ceramic skeleton is partially or full resorbable.

Claim 63. (Previously Presented): A carrier according to Claim 62, wherein the skeleton is formed of calcium phosphate hydroxyapatite.

Claim 64. (Currently Amended): A preformed porous ceramic carrier comprising an interconnected skeleton having pores the majority of which are in the range of from about 20 to about 1000 micron, the carrier comprising block hydroxyapatite and having a density of less than about ~~40~~30% theoretical, the pores containing MTX, the rate of release of the MTX from the pores being controlled.

Claim 65. (Previously Presented): A carrier according to Claim 64, wherein the MTX has been loaded into the pores by centrifugation and/or freeze drying.

Claim 66. (Withdrawn): A preformed ceramic carrier comprising an interconnected skeleton having pores the majority of which are in the range of fro about 20 to about 1000 micron, the carrier having a density of less than about 40% theoretical, the pores containing $\text{Fe(phen)3(ClO}_4)_2$ the rate of release of the $\text{Fe(phen)3(ClO}_4)_2$ being controlled.

Claim 67. (Withdrawn): A carrier according to Claim 66, wherein the $\text{Fe(phen)3(ClO}_4)_2$ has been loaded into the pores by vacuum impregnation.

Claim 68. (Withdrawn): A preformed porous ceramic carrier comprising an interconnected skeleton having pores the majority of which are in the range of from about 20 to about 1000 micron, the carrier having a density of less than about 40% theoretical, the pores containing $\text{Fe(phen)3(ClO}_4)_2$ and a glycolide, the rate of release of $\text{Fe(phen)3(ClO}_4)_2$.

Claim 69. (Withdrawn): A preformed porous ceramic carrier comprising an interconnected skeleton having pores the majority of which are in the range of from about 20 to about 1000 micron, the carrier having a density of less than about 40% theoretical, the pores containing Cisplatin. the rate of release of the Cisplatin being controlled.

Claim 70. (Withdrawn): A preformed porous ceramic carrier comprising an interconnected skeleton having pores the majority of which are in the range of from about 20 to about 1000 micron, the carrier having a density of less than about 40% theoretical, the pores containing Cisplatin and a glycolide, the rate of release of the Cisplatin and a glycolide being controlled.

Claim 71. (Withdrawn): A preformed porous ceramic comprising an interconnected skeleton having pores the majority of which are in the range of from about 20 to about 1000 micron, the carrier having a density of less than about 40% theoretical, the pores containing prednisolone, the rate of release of the prednisolone being controlled.

Claim 72. (Previously Presented): A carrier according to Claim 38, shaped for orthopaedic, maxillo-facial, or cranio-facial replacement.

Claim 73. (Previously Presented): A carrier according to Claim 38, shaped for location at

Application No. 10/728,006
Amendment Dated 10/30/2007
Reply to Office Action of August 9, 2007

an intramuscular site, interperitoneal site, subcutaneous site, central nervous system or
ocular site.

Claim 74. (Withdrawn): A carrier according to Claim 38, wherein the pores contain a
general chemical or resin or petroleum derivative or explosives.